



## Depression in elderly persons subject to childhood maltreatment is not modulated by corpus callosum and hippocampal loss.

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**Table 1.** Differences between subjects having experienced or not experienced an adverse childhood life event on demographic and clinical variables

Variable	<i>Any adverse event</i>					
	<i>No</i>		<i>Yes</i>		<i>P-value</i>	
	<i>N=91</i>	<i>n</i>	<i>n</i>	<i>%</i>		
<b>Gender</b>						
Men		51	56.04	157	46.73	0.11
Women		40	43.96	179	53.27	
Age (in years) mean (SD)			72.06 (3.94)		70.61 (3.62)	0.002
<b>Head injury</b>						
No		84	93.33	301	90.66	0.43
Yes		6	6.67	31	9.34	
<b>Current depressive symptomatology*</b>						
No		76	83.52	250	74.85	0.08
Yes		15	16.48	84	25.15	
<b>Major depressive episode lifetime</b>						
No		74	83.15	226	69.75	0.01
Yes		15	16.85	98	30.25	
<b>Number of major depressive episode</b>						
0		74	83.15	226	71.52	0.06
1		12	13.48	58	18.35	
2 or more		3	3.37	32	10.13	
Age at onset of major depressive episode		39.80 (15.58)		46.27 (16.56)		0.16
<b>Suicide attempt</b>						
No		88	98.88	308	95.65	0.21
Yes		1	1.12	14	4.35	
<b>MMSE</b>						
<26		80	87.91	295	87.80	0.98
≥26		11	12.09	41	12.20	

	<i>Any adverse event</i>					
	<i>No</i>		<i>Yes</i>			
	<i>N=91</i>		<i>N=336</i>			
<i>Variable</i>	<i>n</i>	<i>%</i>	<i>n</i>	<i>%</i>	<i>P-value</i>	
Nart Score			21.01 (5.62)	21.49 (5.87)	0.48	
Alcohol (g/day)						
<12	15	16.48	49	15.03	0.24	
12-36	62	68.13	246	75.46		
>36	14	15.38	31	9.51		

\*CES-D  $\geq 16$  or currently treated with anti-depressants

**Table 2.** Associations between sociodemographic variables, clinical characteristics and corpus callosum (CC) area ratio, and hippocampal (HC) volume ratio.

Variable	CC area ratio		HC volume ratio	
	Correlation coefficient	p-value	Correlation coefficient	p-value
	or mean (SD)		or mean (SD)	
Age (in years)	-0.22	<.0001	-0.14	0.004
NART Score	-0.05	0.38	0.02	0.70
Gender				
Men (n=208)	0.58 (0.09)	0.001	5.64 (0.76)	0.05
Women (n=219)	0.61 (0.09)		5.78 (0.66)	
Lifetime major depressive episode				
No (n=300)	0.59 (0.09)	0.14	5.65 (0.70)	0.06
Yes, currently (n=8)	0.58 (0.06)		6.00 (0.70)	
Yes, in the past (n=105)	0.61 (0.09)		5.81 (0.73)	
Serious events after 18 yrs				
No (n=271)	0.59 (0.09)	0.20	5.72 (0.72)	0.04
Yes (n=74)	0.58 (0.10)		5.53 (0.67)	
Recent events - last 2 yrs				
0 (n=171)	0.60 (0.10)	0.91	5.70 (0.72)	0.11
1 (n=139)	0.60 (0.09)		5.64 (0.74)	
2 or more (n=103)	0.60 (0.09)		5.83 (0.66)	
Lifetime head injury				
No (n=385)	0.60 (0.10)	0.02	5.72 (0.71)	0.42
Yes (n=37)	0.57 (0.08)		5.62 (0.70)	
Parents had problems with alcohol				
No (n=384)	0.60 (0.09)	0.15	5.71 (0.71)	0.72
Yes (n=43)	0.62 (0.11)		5.67 (0.74)	

**Table 3.** Association of adverse events with corpus callosum (CC) area ratio and hippocampal (HC) volume ratio adjusted for age, sex and head injury

Variable	Whole sample			
	CC area ratio		HC ratio	
	mean (SD)	p-value	mean (SD)	p-value
<b>Any adverse event</b>				
No (n=91)	0.58 (0.11)	0.43	5.54 (0.87)	0.07
Yes (n=336)	0.59 (0.15)		5.70 (1.15)	
<b>Physical and / or sexual abuse</b>				
No (n=91)	0.58 (0.16)	0.90	5.69 (1.42)	0.40
Yes (n=13)	0.58 (0.10)		5.90 (0.86)	
<b>Verbal abuse from parents</b>				
No (n=91)	0.58 (0.15)	0.45	5.69 (1.21)	0.35
Yes (n=28)	0.60 (0.10)		5.85 (0.83)	
<b>Humiliation, mental cruelty or excessive physical mistreatment</b>				
No (n=91)	0.57 (0.14)	0.65	5.58 (1.23)	0.31
Yes (n=39)	0.58 (0.10)		5.75 (0.90)	
<b>Mental disorder in parents</b>				
No (n=91)	0.57 (0.14)	0.05	5.60 (1.11)	0.13
Yes (n=79)	0.60 (0.13)		5.78 (1.01)	
<b>Poverty, financial difficulties</b>				
No (n=91)	0.58 (0.14)	0.07	5.58 (1.08)	0.02
Yes (n=108)	0.60 (0.14)		5.84 (1.06)	
<b>Parents too often shared their problems with children</b>				
No (n=91)	0.58 (0.15)	0.50	5.59 (1.26)	0.56
Yes (n=58)	0.59 (0.13)		5.67 (1.09)	
<b>Death of parent</b>				
No (n=91)	0.57 (0.14)	0.44	5.58 (1.14)	0.51
Yes (n=77)	0.56 (0.13)		5.65 (1.06)	
<b>Experienced war/ catastrophe</b>				
No (n=91)	0.58 (0.12)	0.53	5.55 (0.92)	0.06
Yes (n=246)	0.59 (0.15)		5.72 (1.14)	